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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,511	03/12/2004	Tomoaki Hiwatashi	Q80390	6398
23373	7590	04/06/2005	EXAMINER	
SUGHRUE MION, PLLC			ASINOVSKY, OLGA	
2100 PENNSYLVANIA AVENUE, N.W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20037			1711	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,511	<b>Applicant(s)</b> HIWATASHI ET AL.	
	<b>Examiner</b> Olga Asinovsky	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/12/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-20 and 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mougin U.S. Patent 6,552,146.

Mougin discloses a composition for a cosmetic utility and treatments of the skin, hair, and nails or for obtaining a film, column 13, lines 8-9 and abstract. The composition comprises a polymer having a "star" structure of the formula (I) at column 2, line 60, wherein M1, M2 and Mi represents a polymeric chain, column 2, lines 66-67. The polymeric chain has a block structure with a molecular weight from 500 to 2,000,000, column 3, lines 8-10. The polymeric chain is obtained by polymerizing of ethylenically unsaturated monomers having general formula at column 4, line 10. The monomers include hydrophilic monomers such as carboxylic acid, 2-hydroxyethyl(meth)acrylate, polyethylene glycol, N-vinylpyrrolidone, vinylcaprolactam and hydrophobic monomers such as (meth)acrylic esters, column 4, lines 15-67, column 5, lines 32-50. Other monomers such as silicone-comprising (meth)acrylates (meth)acrylic esters comprising perfluoroalkyl units or siloxane units can be present, column 6, lines 1-30. The polymeric chain having a block structure may have at least two different units of polymers having a Tg of greater than or equal to 0°C and a Tg of less than or equal to

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approximately 0C, column 9, lines 45-59. The polymeric chain having a block structure and having at least one unit represented by the formulae in the present claim 4 is readable in Mougin invention. The polymer chains are obtained by controlled radical polymerization, in particular by reaction with a nitroxyl radical, column 3, lines 12-17, 30-32 and by atom transfer radical polymerization, column 3, line 44. Therefore, the Mw/Mn of being 2.5 or less in the present claim 8 is inherent in Mougin invention. The polymer can be present in the medium in a form dissolved or dispersed in an aqueous or alcohol phase, column 10, lines 56-60, for the present claim 9. The initiators are readable in the present claim 10, column 8, lines 1-41. Selection of a cationic polymer produced from such as N-vinylpyrrolidone and/or N-vinylcaprolactam could be readable in the present claim 16.

Mougin does not disclose a block copolymer comprising a straight-chain block copolymer for the present claim 1 nor a polymer film having a Young's modulus for the present claims 11-12, and, a polymer containing a betaine-structured group for the present claim 20. Although, Mougin discloses a film-forming polymer having a star structure having a polyfunctional center A and at least two polymer chains=branches, it would have been obvious to one of ordinary skill in the art to consider that a cosmetic polymer composition in the present claims can also be formed from a star block copolymer having at least two polymer chains=branches such as disclosed by Mougin invention, and to consider that each polymer chain has a block structure having at least two polymerized monomeric units. Also, it is obvious to consider that a film-forming polymer can have a bentaine-structured group in Mougin invention because Mougin

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discloses wide choices of polymerizable monomers having various functional groups, thus the desired Young's modulus can be obtained by selecting the polymerized monomers for obtaining the desired properties.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18 of U.S. Patent No.

6,375,932. Although the conflicting claims are not identical, they are not patentably

distinct from each other because The chemical formulation of a hair cosmetic

composition in claims 1-18 of Patent'932 is readable in the present claims. The

difference is that claims 1-18 in Patent'932 do not disclose a block copolymer having at

least two glass transition points. However, it would have been obvious to one of

ordinary skill in the art to consider that a hair cosmetic composition comprising

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polymerizable hydrophobic unsaturated monomer and a water-soluble polymer is a block copolymer having two units and having two different glass transition temperatures.

5. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being obvious over Hiwatashi et al U.S. patent 6,375,932.

The applied reference has a common inventor's name with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). Hiwatashi discloses a cosmetic composition having at least two polymeric units. Hydrophilic and hydrophobic units are readable in said cosmetics composition. The betaine-groups could be present, column 11, lines 19-

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21. In the working examples beginning at column 13 the process for obtaining the resulting polymer discloses at least two steps conditions. Therefore, it would have been obvious to one of ordinary skill in the art to consider that the resulting polymer is a block copolymer having at least two glass transition points. Selection of polymerizable monomers would be obvious to obtain the desired Young's modulus.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References have been considered.

7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



April /1, 2005

Olga Asinovsky  
Examiner  
Art Unit 1711



James J. Seidle  
Supervisory Patent Examiner  
Technology Center 1700